

Using the Signlab e6 Design Environment

Part 3 – Using Signlab with Print and Cut Devices

I. INTRODUCTION

Even though outputting to print and cut devices is a fairly straightforward affair, we at CADlink have found it useful to be equipped with some useful tips to get it all working flawlessly. Towards this end, this part of the “Using e6” document will provide a general procedure to help you get Signlab and your output device to work together correctly.

As with so many things, there can be many methods that will accomplish roughly the same thing. The aim of this document is to outline the main techniques involved towards accomplishing a print and cut through the RIP and Print feature, and will leave out the more obscure and “routine” items. For Example: You may be asked to Draw an object on the screen, but you will not be told how to do it as it is a routine and documented feature. Therefore, it is a good idea to have the user’s guide handy while running through these procedures, in case you need to read up on a feature referred to in this document. This document also outlines the procedures to send a print-and-cut job through the Roland Colorchoice RIP.

NOTE: Although this procedure applies to all print and cut devices, particular emphasis is placed on the Roland PC-600.

II. PREPARING THE DESIGN ENVIRONMENT

Using the Correct Palette

When your intended output is to a resin or foil type print and cut device, it is recommended that you use one of the Manufacturer’s Palettes supplied with Signlab. This is because the manufacturer’s palettes are already customized with the spot color foils which these devices often use. If your print and cut device is an ink-jet type, or you never intend to use spot-color foils, feel free to use the Signlab default palette.

Loading the correct manufacturer palette

If you do many print-and-cut jobs that include spot colors, you will probably wish to make the manufacturer’s palette your default (shop) palette. Full instructions for loading a palette are in the users guide but, in a nutshell, here’s how to do it:

- right-click on the default palette (a menu will appear)
- from the menu, select Load .. New
- select the palette you want to use, then click on the Open button
- the manufacturer’s palette will now be showing as the palette

So that’s how to load the manufacturer’s palette from within Signlab, but how do you make it show up every time you start your Signlab application? Here’s how:

- From the Options menu, select Signlab Setup.. General Preferences
- In the dialog box which appears there is a section regarding the palette
- Enable the “Load Palette on Startup” checkbox, but Disable the “Save Palette on Exit” option (having the Save Palette option enabled can cause corruption of the palette file, so I do not recommend using that option)
- Click on the Browse button then, in the dialog box which appears, specify the name of the manufacturer palette; click on the Save button
- You may now exit the General preferences dialog box by pressing the OK button
- The next time you open Signlab, the manufacturer palette will automatically load

Here is a list of several devices and their corresponding palette names:

- Gerber Edge – GerberEdgeDirect.Pal (not a print and cut device, but it uses spot foils)
- *Roland PC-60 – RolandPC60.Pal
- *Roland PC-600 – RolandPC600.Pal

* If using Roland ColorChoice, you MUST load and use the ColorChoice.pal palette file as your shop palette.

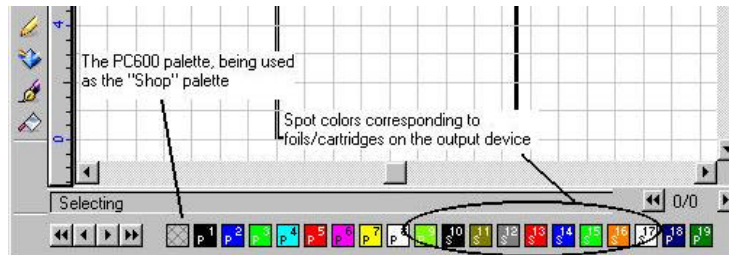


Figure 1 – Manufacturer’s palette loaded as the shop palette

Setting up “Soft Proofing”

Signlab e6 supports soft proofing. This means that your video monitor will give be able to display to you the colors as they will print out on your printer (eliminating the discrepancies often experienced between the monitor and the printer). All the details for doing this are in your e6 user guide. There is also a how-to in this series entitled “How to Use Color Management” which will assist you in setting it up. This document may be downloaded as a PDF from our website.

III. PREPARING A GRAPHIC FOR PRINT AND CUT

Setting up the cut lines

Probably the best way to prepare a graphic for the cutting portion of a print-and-cut job is to use the Contour Cut feature. Although there are different methods you can use to tell the print and cut device what to cut, the most explicit method is to create a contour cut line. The line that gets created as a result of using the contour cut feature is a special line. This ensures that only the lines that you create for the purpose of cutting will actually get cut. The other methods do not ensure this, so those details will not be covered in this document.

A contour cut object can be created on either vector or raster (bitmapped) graphics. The contour cut dialog box allows you to specify what color you wish the contour to be. Although the color you specify is irrelevant, it is a good idea to make the color something that contrasts well against the graphic to be printed. It is also a good idea to ensure that the color you pick is a PROCESS, not spot, color.

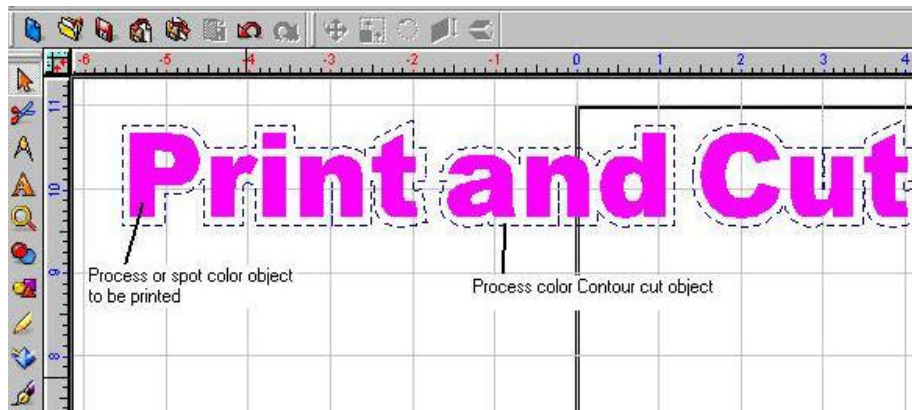


Figure 2 – A graphic with a contour cut object applied to it

Some guidelines to follow

It is a good idea at this time to survey your graphic and make sure that it follows some simple guidelines:

- no objects with “triangular” gradients (this will be supported in a later release of Signlab e6 RIP)
- any objects with gradients must contain only process colors; NO spot colors allowed (this will also be supported in a later release of Signlab e6 RIP)
- Contour cut objects, if any, should be made with a process color from the color palette (not absolutely necessary, but a good general practice)

- Make a note of ALL foils that will be required to do the job so that you will know how to setup your printer. It is a good idea to make a note of the cartridge numbers associated with any graphic which has a spot color, by referring to the color plate information on the status bar

IV. PREPARING THE PRINTER FOR A PRINT AND CUT JOB

So now its time to make sure the printer is ready to go. On the printer, check the following:

- Cartridge(s) are loaded according to the manufacturer's instructions
- all cartridges required to do the entire job are loaded in the printer (if foils are loaded one at a time, such as with a Gerber Edge, make sure all the foils you will need are available)
- for all spot foils, make sure that the number on the cartridge matches the cartridge number on the Signlab palette. **If the spot color cartridge numbers do not match the corresponding numbers on the palette, an error on the printer will result.**

V. SENDING THE GRAPHIC TO THE PRINT AND CUT DEVICE

Your graphic is ready and your printer is ready. Now it is time to get the design to the printer. There is an initial setup that you should only need to do once (or every time you need to change something) but, once that is done, printing is only a couple of mouse clicks away.

The instructions below are NOT intended to replace the users guide. It will focus only on those items critical to a successful print and cut job. Therefore, you may need to refer to the "Printing Basics" and "Photoscript RIP" chapters of the Signlab e6 Users Guide.

NOTE: If you are planning to print through the Roland ColorChoice RIP, skip to the ColorChoice instructions below.

- From Signlab's File menu, select RIP and Print. The following dialog box will appear:

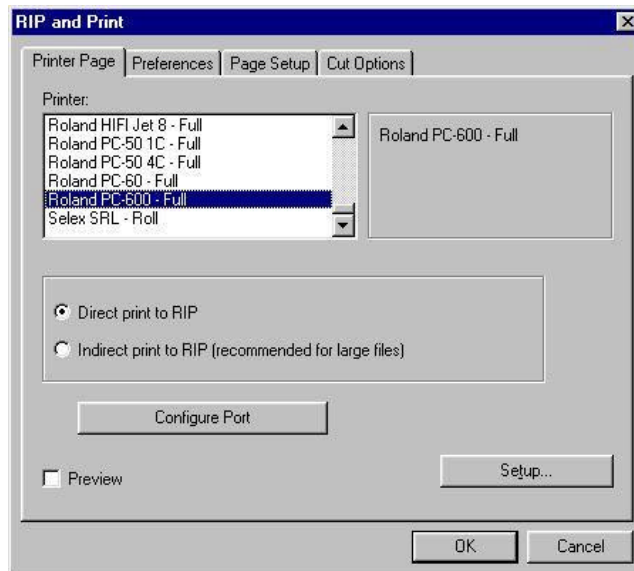


Figure 3 – Signlab's RIP and Print dialog box

On the Printer Page Tab:

- From the list of printers, select the one you will be using
- If you wish to see a print preview, enable the Preview checkbox (lower left corner)
- Click the Configure Port button and specify the correct printer name and port location. Click on OK to return to the RIP and Print dialog box (the Photoscript Window will likely appear at

this time, so it will be necessary to minimize it so that you may see the RIP and Print dialog box)

- Click the Setup button (the Printer Setup dialog will appear). On the Setup Tab, specify a page size you would like to use. On the Printer Settings Dialog tab, select the Print Mode setting, and then, in the Setting Options list select the print mode you want (many use the 100lpi screening 600 mode). Once set, click the OK button to return to the RIP and Print dialog.

On the Cut Options Tab:

- Put a checkmark in the Enable Cutting checkbox
- In the Objects Cut by section, select the “Contour Cut Lines” radio button (assuming you followed this document’s recommendation to use the Contour Cut feature for all objects you intend to be cut).

On the Preferences Tab:

- Enable the Include Bitmaps checkbox (just in case there is a bitmap in your graphic)
- If there is an “Anti Aliasing” combo box, make sure it is set to “None”

Now for the moment of truth. On the RIP and print dialog box, click on the OK button. If you had enabled the Preview checkbox, you will now see a preview of your graphic. This is a good chance to do a final check of your graphic. If everything looks right, click the Print button. Your printer will now print and cut your graphic.

VI. PRINTING THROUGH ROLAND COLORCHOICE

Some users may wish to use the RIP that ships with Roland printers. This RIP, known as Colorchoice, works with several software packages, of which Signlab is one. Both Signlab and the design in Signlab need to be set up so that Colorchoice will recognize the spot colors and contour cut objects correctly.

Proceed as follows:

1. Preparing the design environment

Prepare the design environment as specified in the “Preparing the Design Environment” section of this document. Make sure that you load the “ColorChoice.Pal” palette file as your shop palette. This is important because ColorChoice uses the NAME assigned to a spot color (ex: “Red_Resin”), rather than the cartridge number, to know what spot cartridge to use.

2. Preparing the Graphic

There are different setups depending on whether or not your Signlab package has the Contour Cut feature (located in the Cut menu.) If you have the Contour Cut feature, you can refer only to the “Preparing the Graphic” section for this step. But, if you do NOT have the Contour Cut feature, you must use an alternative method to setup your objects that you wish to cut. The objective is to assign both a hairline line style and a ContourCut palette color layer to that objects hairline. Here’s how to do it:

a. Assign a hairline line style to the desired object:

- Click on the object
- Click on the Line Style Tool (located on the left-side toolbar). A toolbar will appear at the top of your screen. On that toolbar, click on the “Hairline” line style, and then click on the design screen to apply the change.



Figure 4– The Stroke Tool button and the Stroke tool bar with the Hairline style selected

b. Assign the correct color to the hairline:

- On the ColorChoice palette, there is a palette number 17. That palette number is assigned the name “ContourCut”. This is the color palette plate you will need to use. To use it, you must RIGHT-click (use the right mouse button rather than the left) on it. This will have the effect of assigning that palette color to the hairline of that object.

(NOTE: If you have completed these steps but still do not see any hairline on your object, it could be because the color of the hairline is blending in with the color of the fill AND/OR you have your Show Line Style option turned off (this option is found in the View menu). Also, it may be easier to see the hairline if you turn off the “highlight selected objects” option (found in the Options>>Signlab Setup>>Selection Tool Settings dialog box)



Figure 5 – Right-click on the S17 to apply the CutContour layer to the object's hairline

3. Preparing the Printer

Prepare the printer as follows:

- Cartridge(s) are loaded according to the manufacturer's instructions
- All cartridges required to do the entire job are loaded in the printer.
- Make sure that any spot foils required for the job are loaded

4. Sending the Graphic, Through ColorChoice, to the Print and Cut Device

This instruction assumes that you have already installed Roland ColorChoice according to the manufacturer's instructions. If you have not yet done that, do so now.

To send a graphic from Signlab, proceed as follows:

- From Signlab's File menu, select Print (NOT Rip and Print). The following dialog box will appear:

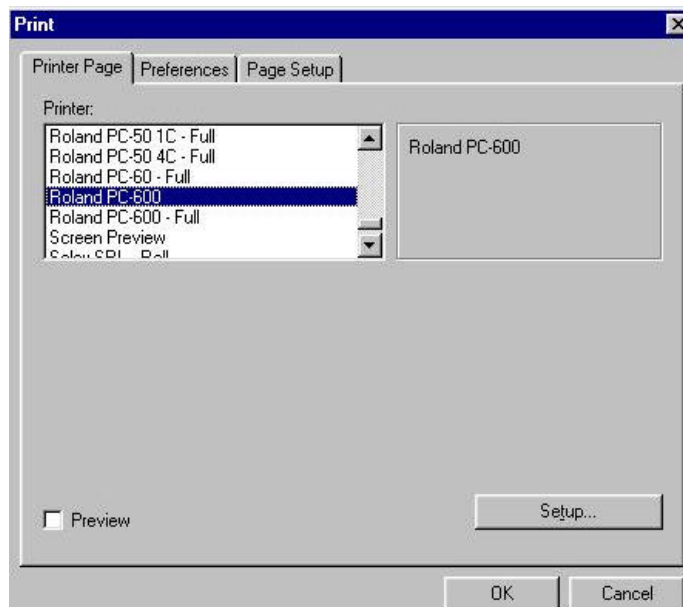


Figure 6 – Signlab's Print Dialog Box

On the Printer Page Tab:

- From the list of printers, select the driver that you installed when you installed ColorChoice.
- If you wish to see a print preview, enable the Preview checkbox (lower left corner)
- If you wish to check that your Roland driver is setup correctly , click the Setup button (the Setup dialog for your will appear). You will definitely want to ensure that the driver has both printing and cutting enabled. Make any required changes then, click the OK button to return to the Print dialog.

On the Preferences Tab:

- Enable the Include Bitmaps checkbox (just in case there is a bitmap in your graphic)
- If there is an "Anti Aliasing" combo box in this tab, make sure it is set to "None"
- Once you are satisfied that these settings are correct, press the OK button on the Print dialog box. If you had enabled the Preview checkbox, you will now see a preview of your graphic. This is a good chance to do a final check of your graphic. If everything looks right, click the Print button. Your printer will now print and cut your graphic.

END NOTE:

In older versions of ColorChoice the default setting for postscript within the Windows driver's Properties dialog used by color choice was set to "PostScript- Optimize for Portability- ADSC". In version 4 of ColorChoice, however, the default value is set to "Postscript- Optimize for speed". With this setting, printing out of Signlab can cause a RIP error in ColorChoice. Therefore, before printing to Roland ColorChoice, go to the Postscript tab in the postscript driver's dialog box, and make sure the Portability option is set to "PostScript - Optimize for Portability- ADSC".